

CLAIMS

1. Plug (21) for closing off a pipeline (20) for a fluid flow, comprising
anchoring (24) and sealing (25) means for anchoring and sealing against the
internal wall of the pipeline (20), which means are operated by at least one
hydraulic cylinder, which hydraulic cylinder comprises a cylinder with a
cylinder chamber (6), a piston head (4) situated within the cylinder chamber
(6) and dividing it in two sub chambers (7, 7') and a piston rod (5) which
runs through the piston head (4) and through at least one of the sub chambers
(7, 7'), wherein the hydraulic power unit (8) and remote operation devices
for the hydraulic cylinder are situated at least partly within the piston head
(4) and or the piston rod (5).
2. A hydraulic cylinder (1) comprising a cylinder chamber (6), a piston head (4)
within said cylinder chamber (6) forming two sub chambers (7, 7') of said
cylinder chamber one on each side of the piston head (4), and a piston rod
which runs from one side of the piston head (4) through at least one of said
sub chambers (7, 7'), wherein the hydraulic power unit (8) for operation of
the hydraulic cylinder (1) is situated at least partly within the parts forming
the piston head (4) and or the piston rod (5).
3. Hydraulic cylinder or plug according to one of the preceding claims, wherein
the piston rod (5) runs through both sub chambers (7, 7').
4. Hydraulic cylinder or plug according to one of the preceding claims, wherein
the piston rod (5) and or the piston head (4) comprises at least partly a
remote controlling device and or the hydraulic power unit (8), comprising at
least motor (10), circuit board (13), valves (12), pressure transmitter (14),
hydraulic pump (11), etc, for the hydraulic cylinder (1).
5. Hydraulic cylinder or plug according to one of the preceding claims, wherein
the motor (10) and the hydraulic pump (11) of the hydraulic power unit are
positioned at least partly within the piston rod (5).
6. Hydraulic cylinder or plug according to one of the preceding claims, wherein
the piston head (4) comprises feed lines for hydraulic fluid from the first sub
chamber (7), through said valves (12) and said pump (11) to the second sub
chamber (7').
7. Hydraulic cylinder or plug according to one of the preceding claims, wherein
the hydraulic cylinder is two-way operational and the hydraulic pump (11) is
a two-way pump.